REMARKS

Reexamination and reconsideration of this application as amended is requested. By this amendment Claims 1-11 have been canceled. Claims 12, 15, 19, 20, and 22 have been amended. Claims 12-25 remain in the application.

Claims 12, 13, 15-17, and 19-25 were rejected as anticipated by Pileggi et al. (USPN 5,488,912). Pileggi et al. disclose panels of cloth coated on both sides with polymeric material. The panels are for dividing the space within a railroad gondola car and separating various kinds of bulk cargo. The panels' "margins are securely clamped to respective elements of the structural frame of the car" (column 4, lines 18, 19) by clamp assemblies 70.

Applicant also discloses cloth and polymeric material, but they are disposed and used quite differently within a structure. Applicant's invention is a coating for strengthening a structure, which includes a wall having a surface, against explosion or similar sudden extreme force. The coating is attached to the surface by adhesion (page 4, lines 12-14), as defined in Merriam Webster Collegiate dictionary as "the molecular attraction exerted between the surfaces of bodies in contact." To help further distinguish the inventions of Pileggi et al. and Applicant, Applicant's claim 12 has been amended to specify that the structure includes "a wall having a surface" and that first layer elastomer is "in contact with and adhering to the surface."

Pileggi et al. disclose no teaching nor suggestion that their panels could be attached to a wall surface by means of adhesion of the polymeric material.

In regard to claims 16, 17,and 22, the Examiner opined that "the method of forming an article is not germane to the issue of patentability of the article itself. Furthermore, in the present invention, regardless of the intermediate steps required to form the article, the resulting final product is the same." With respect, a sheet of textile that is coated with a polymeric precursor resin and cured in a free-standing condition, then clamped to a frame, has completely different properties from a composite formed by directly applying the same resin to a wall, pressing a sheet of textile into the

uncured resin, applying a second layer of resin over the first layer, then allowing the composite to cure adhered to the wall. In the case of the present invention, preparing a coating by wet lay-up directly onto the surface of the wall results in an end product that is quite unlike the panels of Pileggi et al. and the inventions are not comparable.

Pileggi et al. disclose that the cloth used for their panels be coated on both sides with polymeric material, at least one side of which is impregnated with "particles of a hard wear-resistant material such as alumina or silicon carbide ..." (column 6, lines 64-65). According to column 6, lines 16-20, the purpose of the coating is to protect the panel from "mechanical abrasion, from harmful chemical reactions, and from potentially damaging radiation." The reason for not completely saturating the cloth with polymeric material is so that "central portion 150 of the cloth, however, may remain unimpregnated and thus free to flexibly carry tensile loads" (column 6, lines 58, 59). Thus, Pileggi et al. do not teach that the polymeric material creates desirable changes in the ductility, elongation, or strength of the textile, to the contrary, they seem to imply that the polymeric material may create undesirable changes in the mechanical properties of the panel, which must be allowed for.

This is in marked contrast to Applicant's teaching that the polymeric material of the present invention consists of at least two layers, the "second layer elastomer in contact with and adhering to the first layer," with "textile embedded between said first and second layers," as stated in claim 12. Applicant does not teach that the central portion of the textile should be left unimpregnated with polymeric material, because the method of forming the composite coating ensures that the textile is fully impregnated. Applicant states on page 4, lines 10, 11, of the specification, "Composite coating 10, applied to a structure, increases the apparent ductility and elongation of the structure." The composite coating of the present invention can modify the mechanical properties of the wall itself because the coating is adhered to the surface of the wall.

The "tension-bearing" panels of Pileggi et al, strung between structural frame elements of the gondola rail car, would have the effect of increasing the **stiffness** of the structure of the car, not its **ductility**. Pileggi et al. do not teach nor suggest that their invention increases the apparent

ductility or elongation of the car

Claim 12 is herein amended to specify that the structure "includes a wall having a surface," as supported in the specification on page 5, lines 13 and 32, and that the elastomer is "in contact with and adhering to the surface." This amendment further distinguishes Applicant's invention from that of Pileggi et al. The panels of Pileggi et al. are inexpensive, repositionable *substitutes* for walls and are attached by clamps to frame elements.

In view of the amendment and these remarks, Claim 12 is seen to be in condition for allowance and allowance is requested

Claim 13-18, depending upon now-allowable claim 12 and reciting further patentable subject matter, are seen to be in condition for allowance and allowance is requested

Claim 14 was further rejected as obvious from Pileggi et al. in that "Pileggi et al. disclose the claimed invention except for the teaching that the woven parallel yarns are spaced apart one-sixteenth of an inch to one inch" and that yarn spacing is merely "a result effective variable." As argued above regarding claim 12, Pileggi et al. do not disclose the claimed invention and claim 14 is not thus obvious from Pileggi et al. Claim 14, depending upon now-allowable claim 12 and reciting further patentable subject matter, is seen to be in condition for allowance and allowance is requested.

Claim 15 is hereby amended to specify that the layers of elastomer are applied to a surface of a wall. This amendment further distinguishes Applicant's invention from that of Pileggi et al. as discussed above for claim 12. In view of the amendment and these remarks, Claim 15 is seen to be in condition for allowance and allowance is requested

Claims 16 and 17, depending upon now-allowable claim 15 and reciting further patentable subject matter, are seen to be in condition for allowance and allowance is requested

Claim 18 was rejected as anticipated by Pileggi et al. and obvious from Pileggi et al. in view of Isley, Jr et al. Regarding anticipation, the general remarks above and arguments for claim 12 apply also to claim 18. Claim 18 is ultimately dependent upon allowable claim 12 and recites further patentable subject matter.

Claim 18 is not an obvious modification of Pileggi et al. in view of Isley, Jr et al. Pileggi et al. disclose a panel used as a substitute for a cargo-dividing wall inside a rail car and clamped by its edges to a frame element. Isley, Jr et al. disclose a panel that is similar to that of Pileggi et al., in that the panel is formed and cured in a freestanding condition then attached mechanically to a structure. Neither Pileggi et al. nor Isley, Jr et al. teach nor suggest adhering a composite coating to a wall by applying the uncured resin and textile components to the wall and curing them in-situ. In view of this argument, claim 18, depending ultimately upon allowable claim 12 and reciting further patentable subject matter, is seen to be in condition for allowance and allowance is requested.

Independent claim 19 is hereby amended similarly to claim 12. Claim 19 claims the combination of a structure and a composite coating. The structure is specified as "including a wall having a surface," and both the composite coating and the first layer are specified as adhering to the "surface" of the wall. In view of this amendment and the arguments presented for claim 12, claim 19 is seen to be in condition for allowance and allowance is requested.

Claim 20 is hereby amended by substituting "surface of said wall" for "structure" in congruence with claim 19. Depending upon now-allowable claim 19 and reciting further patentable subject matter, claim 20 is seen to be in condition for allowance and allowance is requested.

Claim 21, depending upon now-allowable claim 20 and reciting further patentable subject matter, is seen to be in condition for allowance and allowance is requested.

Claim 22 is hereby amended by substituting "surface" for "structure" in congruence with claim 19. Depending upon now-allowable claim 21 and reciting further patentable subject matter, claim 22

is seen to be in condition for allowance and allowance is requested.

Claim 23, depending upon now-allowable claim 22 and reciting further patentable subject matter, is seen to be in condition for allowance and allowance is requested.

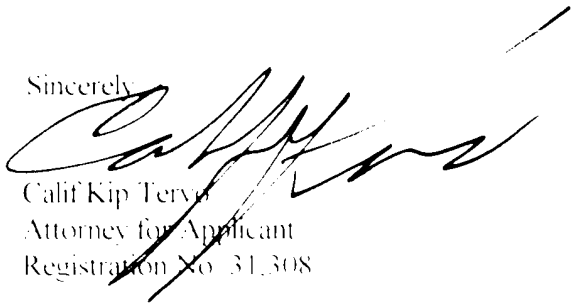
Claim 24 was rejected as obvious from Pileggi et al. in that "Pileggi et al. disclose the claimed invention except for the teaching that the woven parallel yarns are spaced apart one-sixteenth of an inch to one inch" and that yarn spacing is merely "a result effective variable." As argued above regarding claim 14, claim 24 is not obvious from Pileggi et al. Claim 24, depending upon allowable claim 23 and reciting further patentable subject matter, is seen to be in condition for allowance and allowance is requested.

Claim 25 was objected to on the basis of a spelling error. Claim 25 is hereby amended to correct the error. Applicant thanks the Examiner for the observation.

Claim 25 was also rejected as unpatentable over Pileggi et al. in view of Isley, Jr et al. As argued above regarding claim 18, claim 25 is not obvious from Pileggi et al. in view of Isley Jr et al. Claim 25, ultimately depending upon now-allowable claim 19 and reciting further patentable subject matter, is seen to be in condition for allowance and allowance is requested.

The Examiner is requested to contact the undersigned at (619) 234-4034 if it will aid in the disposition of this application.

Sincerely,



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